

REMARKS

Claims 1-16, 26-32 and 45-48 are presented for examination. Claims 1-16, 26-32 and 43-44 were previously elected for examination in response to a restriction requirement.

Claims 17-25 and 33-42 were withdrawn and claims 43-44 were previously cancelled.

Claims 7, 16 and 32 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claims 1-5, 8-12, 14, 26, 28-30, 45-46 and 48 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Reny, WO89/09806. Claims 1-16, 26-32 and 44-48 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Coughenour, Chemical Abstracts 120:195478 or Dingley, Chemicals Abstracts 116:86516 or Evans, U.S. Patent No. 5,031,579 each in view of Mascioli, U.S. Patent No. 5,240,631, or Greaney, U.S. Patent No. 5,422,026. Claims 1-5, 8-11, 13-14, 26-27, 29-32, 45 and 47-48 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wood, U.S. Patent No. 4,455,248.

Claims 7, 16 and 32 have been amended to clarify the concentration of propylene glycol present in the fluid and to have the concentration correspond to the concentrations of the additives. As described below, claims 7, 16 and 32 as amended are fully supported by the specification as required by 35 U.S.C. § 112. Claims 7, 16, 31, 32 and 48 have been amended to correct typographical errors in the spelling of "tolyltriazole". Claim 45 has been amended by making a grammatical amendment for clarity. No new matter is added.

As described in the specification and recited in the claims as amended, the present invention is directed to a non-aqueous, propylene glycol based heat transfer fluid. The heat transfer fluid contains only additives that are soluble in propylene glycol. The non-aqueous heat transfer fluid does not contain any additives, such as silicates or buffers, that require the

addition of water to the non-aqueous heat transfer fluid to dissolve the additive or to permit the additive to function in the fluid (e.g. such as by dissociation). The term “non-aqueous” as used in the amended claims is defined in paragraph 0056 of the specification as meaning that “water is present as an impurity in the coolant formulation in no greater than a concentration of about 0.5% by weight.” The non-aqueous heat transfer fluid contains no added water. As recited in claim 45, and described in the specification at paragraph 0047, the non-aqueous heat transfer fluid may contain up to 60% by weight ethylene glycol. Among the advantages of the non-aqueous coolant of the present invention is that a single formulation can be used in many different environments. The non-aqueous coolant is a stable solution with its inhibitors and there is no drop-out or gelling of additives, regardless of use or storage.

As set forth in the Declaration of John Evans filed herewith, the non-aqueous heat transfer fluids recited in the claims are fundamentally different from prior art aqueous heat transfer fluids. The primary heat transfer medium of an aqueous heat transfer fluid is water. The freezing point depressant for a glycol-based aqueous heat transfer fluid is a glycol, typically ethylene glycol. The glycol and water combination also has a boiling point that is slightly higher than water alone. Water is corrosive toward many cooling system metals and corrosion inhibitors that can dissolve in water are required in order to protect against corrosion.

Essential inhibitors for protection against corrosion by an aqueous glycol-based heat transfer fluid require that water be present in order to keep the inhibitors in solution. The literature is replete with warnings against using heat transfer fluid that are too concentrated (i.e., with insufficient water) because of the problem of additive drop-out, such as the drop-out of silicates or phosphates. Water is also required in *concentrates* for making aqueous heat

transfer fluids. The concentrate must contain enough water to keep its additives dissolved during storage prior to the adding of water to make the actual heat transfer fluid.

Use of an antifreeze concentrate that is intended for making an aqueous glycol-based heat transfer fluid as a heat transfer fluid itself (without the additional water) will not work because the inhibitors that require water for solubility will not remain in solution. In an automobile cooling system, for example, the products of additive drop-out are in the form of a gel that will plug heat exchanger passageways and cause the cooling system to malfunction.

The non-aqueous heat transfer fluid of the present invention operates in a fundamentally different way than prior art aqueous heat transfer fluids. The heat transfer medium of the propylene glycol based non-aqueous heat transfer fluid of the present invention is propylene glycol. The parameters regarding the heat transfer depend upon the characteristics of the propylene glycol (or the mixture of glycols if there is more than one). The freezing point of the non-aqueous heat transfer fluid is determined by the freezing point of propylene glycol (or by the freezing point of the mixture of glycols if there is more than one). The boiling point of the propylene glycol-based non-aqueous heat transfer fluid is determined by the boiling point of propylene glycol (or by the boiling point of the mixture of glycols if there is more than one).

Water is not added to the non-aqueous heat transfer fluid . If water is present, it is in small amounts as an impurity. The best performance is achieved when the water content is zero. If there is localized boiling of a non-aqueous glycol-based heat transfer fluid that contains some water present as an impurity, the resulting vapor would be almost entirely water vapor. The water vapor would not condense in the surrounding fluid and would become vented from the system.

Prior to the present invention, the most common heat transfer fluids were water-based and the prior art was primarily directed toward water-based heat transfer fluids. In the limited descriptions of glycol-based, non-aqueous heat transfer fluids, the views regarding additives were: (1) no recognition or discussion of using additives; (2) at least pH control additives were required, or (3) use of additives, including pH control additives, to address the concern of water entering the heat transfer fluid and causing corrosion. These views resulted in various approaches to the use of glycol-based, non-aqueous heat transfer fluids prior to the disclosure of the present invention that resulted in either omission of important additive ingredients or including inappropriate additive ingredients that require water to be present in the heat transfer fluids. For example, some tests of propylene glycol based heat transfer fluids were performed without any corrosion additives present in the fluid, such as those described in Coughenour and Dingley. In other cases, as described for example in Reny, concern about pH caused the inclusion of pH control additives, such as phosphoric acid buffers. In still other cases, as described for example in Mascioli, Greaney and Wood (in antifreeze concentrates that have been incorrectly treated by the Examiner as non-aqueous heat transfer fluids), the heat transfer fluids include water soluble (but non-glycol-soluble) additives, such as sodium metasilicates, that require the presence of added water to dissolve the additives so as to enable them to perform their function. In contrast, the applicant recognized that when the water content is very low, the pH of the fluid is immaterial, and that the heat transfer fluid must avoid all additives that cannot function without water.

Rejection Under 35 U.S.C. § 112, First Paragraph

Claims 7, 16 and 32 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. The examiner states that he cannot find

support in the specification for a propylene glycol amount in the fluid of greater than about 98.5% by weight, although the examiner states that there is support for greater than about 99.0% by weight.

The written description requirement of 35 U.S.C. § 112, first paragraph “ensures that, as of the filing date, the inventor conveyed with reasonable clarity to those of skill in the art that he was in possession of the subject matter of the claims.” Union Oil of California v. Atlantic Richfield Co., 208 F.3d 989, 997 (Fed. Cir. 2000). “In order to satisfy the written description requirement, the disclosure originally filed does not have to provide in haec verba support for the claimed subject matter at issue.” Crown Operations Intern., Ltd. v. Solutia Inc., 289 F.3d 1367, 1376 (Fed. Cir. 2002). The original disclosure must allow one skilled in the art to reasonably discern the limitation at issue in the claims.

The specification at paragraphs 0050-0051 states that the coolant preferably contains sodium nitrate, tolyltriazole and sodium molybdate, and that “[t]he additives can be present in a range of about 0.05% by weight to about 5.0% by weight, and more preferably not above about 3.0% by weight.” The propylene glycol content of a fluid having these additives within the ranges described is necessarily between 99.85% by weight to about 85.0% by weight. The concentration of propylene glycol recited in claims 7, 16 and 22 is well within this range described in the specification.

Plainly, one skilled in the art could reasonably discern the limitation on propylene glycol in claims 7, 16 and 32 from the description in the specification, and the inventor was in possession of the invention recited in these claims at the time that the original disclosure was filed. Accordingly, for at least this reason, the rejection of claims 7, 16 and 32 under 35 U.S.C. § 112, first paragraph is improper and should be withdrawn.

Rejection Under 35 U.S.C. §102(b) Based Upon Reny

Claims 1-5, 8-12, 14, 26, 28-30 and 43-44 stand rejected under 35 U.S.C. §103 as obvious based upon Reny, WO89/09806. As set forth in detail in the paper filed on August 26, 2006, Reny does not teach or describe any composition that meets all of the limitations of the claims as amended. Specifically, Reny does not teach or describe a non-aqueous heat transfer fluid comprising neat propylene glycol, or combinations of propylene glycol and up to 60% by weight ethylene glycol, that contains less than 0.5% by weight water, and that contains no additives requiring the presence of water to dissolve the additive or to enable the additive to perform its intended function. To the contrary, Reny teaches that a propylene glycol based heat transfer fluid must contain phosphoric acid and at least 1% by weight water.

Moreover, at page 4 of the Office Action, the Examiner states that “Reny et al, however, do not specifically teach with sufficient specificity coolant compositions comprising less than 0.5% by weight of water.” To anticipate a claim under Section 102(b), a single prior art reference must disclose each and every element set forth in the claim. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987); MPEP § 2131. Because Reny does not describe a heat transfer fluid comprising propylene glycol, or propylene glycol and ethylene glycol, that contains less than 0.5% by weight water and no additives requiring added water to dissolve or function, Reny does not anticipate claims 1-5, 8-12, 14, 26, 28-30 and 43-44.

The examiner goes on to state that “it would have been obvious to one of ordinary skill in the art to decrease the amount of water present in example 1 of Reny”. Obviousness is not a proper basis for a rejection under 35 U.S.C. § 102(b). Moreover, even if the rejection were considered an obviousness rejection, the examiner is incorrect that one skilled in the art

would have been motivated to reduce the amount of water in example 1 of Reny. As described in detail in applicant's prior paper, as further elucidated below, Reny teaches that no water can be used in fluids containing one or more unspecified alkylene glycols provided the pH is in the appropriate range. Reny also teaches that a phosphoric acid buffer is used to control pH in those cases where it is necessary. In every example provided by Reny that involves propylene glycol and ethylene glycol, a phosphoric acid buffer is used.

The Examiner states that at p. 3 lines 1-15, Reny suggests "compositions that contain no water and thus, these compositions do not contain additives that require water in the fluid to dissolve the additive". The composition described by Reny comprises "at least 90 weight percent of an alkylene glycol or a mixture of two or more alkylene glycols" and "from 0 to 3 weight parts of phosphoric acid." The specification further states, however, that phosphoric acid is added to the fluid "to maintain the pH of the coolant composition in the range of from 7 to 9, preferably from 7 to 8, and only if necessary." Reny, p. 5, lines 22-24. For phosphoric acid to function in a manner as to affect pH, water must be included in order for the phosphoric acid to ionize. Therefore, *the heat transfer fluid described by Reny contains no water only when phosphoric acid is not necessary for the control of pH.*

The set of alkylene glycols is very large and is comprised of ethylene glycol, diethylene glycol, triethylene glycol, tetraethylene glycol, propylene glycol, dipropylene glycol, hexylene glycol, 2 ethyl-1,3-hexanediol, 1,5-pentanediol, *and many others*. (Reny adds glycerol to the list by defining it as an alkylene glycol, while it is actually a triol, not a glycol.) There may be alkylene glycols or mixtures of them for which phosphoric acid would not be necessary, although none of these are specifically identified by Reny. Indeed, on p. 5 lines 24-26, Reny says that "Some alkylene glycol mixtures are within the pH limits, and in

such cases no pH adjustment is required.” However, Reny teaches that, for propylene glycol and for mixtures containing propylene glycol and ethylene glycol, the addition of phosphoric acid is necessary for pH control.

The Examiner refers to p. 5, lines 25-45. As there are only 35 lines on page 5, it is assumed the Examiner meant lines 25-35. In this passage, preparation of the coolant begins with the addition of water to the “alkylene glycol.” Reny says that “more preferably about 3 percent of water is dissolved in propylene glycol”. Then he uses the general “alkylene glycol” as being most preferably used with less than about 1 weight percent water. Some alkylene glycols, according to Reny, do not require buffers but Reny teaches that, for propylene glycol and for mixtures containing propylene glycol and ethylene glycol, the addition of phosphoric acid is necessary for pH control.

The Examiner’s assertion that Reny’s page 9 teaches [PG and EG/PG] compositions that contain little or no water is defective because the only compositions shown with less than 1% water are pure glycols without any additives. These compositions were provided for comparison only, and the results show that they are not practical as heat transfer fluids because they are highly corrosive.

Reny does not teach or suggest embodiments of a heat transfer fluid comprising propylene glycol or ethylene glycol and propylene glycol which contain no additives that require water in the heat transfer fluid to dissolve the additive or to enable the additive to function as recited by the instant claims. Although Reny describes in a general way unspecified alkylene glycols that may not require buffers (and hence water), none of Reny’s embodiments that use propylene glycol as the only glycol, or that use mixtures of propylene glycol and ethylene glycol are in that category. Reny teaches that, for propylene glycol and

for mixtures containing propylene glycol and ethylene glycol, the addition of phosphoric acid is necessary for pH control. Phosphoric acid requires the presence of water in order for it to ionize so that it can perform its function to control pH.

A prior art reference must be considered in its entirety, including portions that lead away from the claimed invention. MPEP § 2141.03; *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art.

In re Wesslau, 353 F.2d 238, 241 (CCPA 1965). The Federal Circuit has held that it is improper to consider a single line taken out of context from a reference without considering other statements in the reference that argue against obviousness. *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 448 (Fed. Cir. 1986).

Reny at most teaches that some undisclosed combinations of alkylene glycols may not require addition of phosphoric acid and water, and that these components are only added when necessary. In all of the fluids described in Reny that contain propylene glycol, however, Reny describes the addition of phosphoric acid and at least 1% water. Although styled by Reny as a “non-aqueous” composition, Reny’s requirement of phosphoric acid in propylene glycol and propylene glycol/ethylene glycol mixtures necessitates a minimum amount of water. The action of the phosphoric acid creates phosphates that further require water for the phosphates to be in solution. Below a minimum amount of water, the phosphates will not remain in solution and will drop out as solids that can plug heat exchanger passages. Reny does not teach, suggest or otherwise describe a heat transfer fluids containing

propylene glycol having less than 0.5% water, nor does Reny suggest the desirability of such a fluid. Therefore, when Reny is considered in its entirety, as required under an obviousness rejection, Reny teaches that propylene glycol based heat transfer fluids require the addition of phosphoric acid and water.

Accordingly, Reny does not teach, describe or otherwise suggest a non-aqueous heat transfer fluid as defined in the specification and recited in the claims as amended comprising propylene glycol with less than 0.5% by weight water and that does not contain any additives that require water to dissolve the additives in the fluid or to enable the additives to function in the fluid. For at least these reasons, claims 1-5, 8-12, 14, 26, 28-30 and 45-48 are not anticipated by Reny, nor are the fluids recited by these claims obvious in view of Reny.

Rejection Under 35 U.S.C. §103(a) Based Upon Coughenour, Dingley or Evans

Claims 1-16, 26-32 and 44-48 stand rejected under 35 U.S.C. § 103 based upon Coughenour, Dingley or Evans in view of each of Mascioli and Greaney. As set forth in detail below, none of these references can be properly combined in a manner which results in the non-aqueous heat transfer fluid of the claims as amended.

Coughenour describes engine tests which were conducted using non-aqueous propylene glycol as an engine coolant. The tests performed by Coughenour included a 500 hour durability test. Coughenour states that the results of the tests quantified “some of the presumed advantages and disadvantages” of the use of non-aqueous propylene glycol, and that the results formed the basis for further work “using total-vehicle systems.” Coughenour’s SAE Paper 930584, *Evaluation of Non-Aqueous Propylene Glycol as an Engine Coolant for Heavy Duty Diesel Engines*, from which the abstract cited by the examiner was taken, states in its *summary and conclusions* (last page), “Non-aqueous propylene glycol demonstrates

extremely good engine cooling system corrosion protection and cylinder liner cavitation suppression.” This statement suggests that there is no need for any coolant additives and nowhere in the Coughenour paper is there any mention of coolant additives or any need for coolant additives. Coughenour does not describe, teach or suggest a non-aqueous propylene glycol heat transfer fluid having dissolved inhibitors as recited in the amended claims, nor does Coughenour suggest the desirability of adding corrosion inhibitors to the heat transfer fluid.

Dingley describes the use of monopropylene glycol both as a component of an engine coolant and as the entire coolant. Dingley describes the use of monopropylene glycol alone in general terms, and Dingley does not teach or suggest a non-aqueous propylene glycol heat transfer fluid having dissolved inhibitors as recited in the amended claims. Dingley’s paper, *Aqueous and Non-Aqueous Engine Coolants Based on Propylene Glycol*, from which the abstract cited by the examiner was taken, states that “in a commercial antifreeze concentrate [i.e. a coolant concentrate for *aqueous* applications], there can be up to ten other ingredients which act to prevent corrosion of the metals of the engine and reduce the degradation of the glycol.” p. 146, lines 6-8. With regard to *non-aqueous* applications (see section 6, beginning on page 149), Dingley is silent regarding coolant additives or any need for coolant additives. Dingley does not describe, teach or suggest a non-aqueous propylene glycol heat transfer fluid having dissolved inhibitors as recited in the amended claims, nor does Dingley suggest the desirability of adding corrosion inhibitors to the non-aqueous heat transfer fluid.

Evans describes a cooling system for internal combustion engines for use with a substantially anhydrous, boilable liquid coolant having a saturation temperature higher than that of water. Evans describes tests of the cooling system that were conducted using neat

propylene glycol as the coolant in the improved design. Evans does not describe, teach or suggest a non-aqueous heat transfer fluid containing corrosion inhibitors of the type recited in the claims, nor does Evans suggest the desirability of adding corrosion inhibitors to the fluid.

Thus, as recognized by the examiner, each of Coughenour, Dingley and Evans do not describe, teach or suggest a non-aqueous propylene glycol based heat transfer fluid having corrosion inhibitors which are soluble in propylene glycol and that do not require the addition of any water to the heat transfer fluid as recited in the claims. The examiner attempts to address this deficiency in these references by stating that each of them can be combined with either Mascioli or Greaney to arrive at the claimed compositions. However, Mascioli and Greaney each require additives for their respective heat transfer fluids that require water in the heat transfer fluid to dissolve the additives to permit the additives to function. The addition of water is consistent with the prevailing view at the time, as set forth in detail in the inventor's prior Declaration, that the common understanding of those skilled in the art at the time of the invention was that additives that required added water were required in anti-freeze formulations.

Mascioli describes corrosion-inhibited antifreeze concentrate formulations and aqueous corrosion-inhibited antifreeze formulations for use in engines. Mascioli states that antifreeze formulations in which propylene glycol is the primary component formed undesirable oxidation products. Col. 2, lines 19-24. Mascioli solves this problem by adding phosphorous acid to the formulation, as well as an alkali metal hydroxide to provide a final pH of 7-10 for the concentrate plus water coolant formulation. Col. 2, lines 24-27, 49-51. Mascioli also includes silicates in the heat transfer fluid in the form of sodium silicate, which is soluble in water, but insoluble in alcohol (see General Description of Sodium Metasilicate,

U.S. Dept. of Labor, OSHA, http://osha.gov/dts/chemicalsampling/data/CH_267715.html).

Col. 2, lines 42-43; col. 3, lines 3-4. These additives taught by Mascioli require the presence of water in the concentrate to dissolve or enable the additive to function, and Mascioli states that the concentrate formulation contains 1 to 5% by weight water. Col. 2, lines 47-48, Table 1.

At page 8 of the Office Action, the examiner states that “it appears that a buffer is not required to be employed” in the composition described by Mascioli. In fact, Mascioli clearly shows in Table 1 that phosphoric acid is added to the formulation, as well as sodium silicate. Both of these additives require water.

A rejection under section 103 cannot be based on selecting only portions of a reference to support the rejection, to the exclusion of other parts of the reference necessary to understanding what the reference fairly suggests to one skilled in the art. *In re Wesslau*, 353 F.2d 238, 241 (CCPA 1965). When Mascioli is considered as a whole, as is required under section 103, Mascioli includes additives requiring water to remain in solution, as well as 1% to 5% added water. Therefore, combining any one of Coughenour, Dingley or Evans with Mascioli results in a concentrate containing additives requiring water to remain in solution or to perform their function, and between 1% and 5% added water. Accordingly, the combination of these references results in a heat transfer fluid that does not meet all of the limitations of the claims as amended.

Greaney describes a heat transfer concentrate similar to that described in Mascioli, except that the fluid of Greaney does not contain phosphates. Col. 2, lines 30-32. As with Mascioli, the heat transfer fluid contains silicates, an alkali metal hydroxide for pH control, and 1% to 5% by weight added water. Col. 2, lines 37-52 and Table 1. Therefore, when read

as a whole, Greaney teaches a heat transfer concentrate that necessarily includes additives requiring water to remain in solution or to perform their function, and between 1% and 5% added water. Accordingly, the combination of any one of Coughenour, Dingley or Evans with Greaney results in a heat transfer fluid that does not meet all of the limitations of the claims as amended.

Thus, each of Mascioli and Greaney teach the addition of an additive requiring water in the heat transfer fluid, and each specifically teaches the addition of some amount of water to the heat transfer fluid. It is only by ignoring these teachings in Mascioli and Greaney that the examiner is able to construct a composition meeting all of the limitations of the claims as amended. "Determination of obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention." *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 546 (Fed. Cir. 1998).

Because the reasons above are sufficient to traverse the rejection, Applicants have not explored, nor do they now present, other possible reasons for traversing such rejections. Nonetheless, Applicants expressly reserve the right to do so, if appropriate, in response to any future Office Action.

Rejection Under 35 U.S.C. §103(a) Based Upon Wood

Claims 1-16, 26-32 and 44-48 stand rejected under 35 U.S.C. § 103(a) based upon Wood. As set forth in detail below, Wood cannot be properly modified in a manner which results in the non-aqueous heat transfer fluid of the claims as amended. Wood states that the composition "necessarily" contains sodium metasilicate. Col. 3, lines 27-55. Although Wood states that "the antifreeze may be formulated as a concentrate using little or no water", (col. 3, lines 7-8), the requirement that the fluid described by Wood contain sodium metasilicate

necessitates the addition of sufficient water for the sodium metasilicate to dissolve and remain in solution, i.e. in order for the sodium metasilicate to function. As set forth in the information sheet from the Occupational Safety & Health Administration, (http://www.osha.gov/dts/chemical_sampling/data/CH_267715.html) sodium metasilicate is not soluble in alcohols such as glycols, but is readily soluble in water. Accordingly, for at least this reason, Wood does not teach or suggest a heat transfer fluid composition as recited in the claims, which recite that the heat transfer fluid of the present invention contain no additive requiring the presence of water in the fluid to dissolve the additive or to enable the additive to function.

At page 6 of the Office Action, the Examiner states that Wood teaches that the compositions may contain "little or no water" in concentrates. Even in the description of the concentrates, however, Wood states that the concentrates typically contain added water. As described in the Declaration of John Evans submitted herewith, even in the concentrate form, it is necessary that the additives remain dissolved. Accordingly, to the extent that Wood suggests a fluid having sodium metasilicate and no added water, the fluid is not operative for its intended purpose.

Moreover, Wood specifically states that in use, substantial amounts of water must be added to the fluid. This is required to ensure that water soluble additives, such as sodium metasilicate, do not precipitate out of solution in use. As described in the Declaration of John Evans submitted herewith, precipitation of water soluble additives during use is a substantial problem with heat transfer fluids which can ruin a heat transfer system.

Finally, although Wood generally states that mixtures of glycols may be used in the anti-freeze compositions described therein, Wood does not teach or suggest combining


ethylene glycol and propylene glycol in any specific proportions, much less in the proportions recited in the amended claims. As described in the application, the present inventors discovered that adding relatively small amounts of propylene glycol to ethylene glycol unexpectedly resulted in a non-aqueous heat transfer fluid having substantially reduced toxicity. Wood does not teach or suggest combining ethylene glycol and propylene glycol in any specific amounts, much less in the proportions recited in the amended claims. Wood is therefore insufficient to support a rejection under 35 U.S.C. § 103(a). See In re Baird, 16 F.3d 380, 382 (“The fact that a claimed compound may be encompassed by a disclosed generic formula does not by itself render that compound obvious.”); MPEP § 2144.08.

Accordingly, for at least these reasons, the methods recited in the amended claims are not described, taught or suggested in Wood, and applicants respectfully submit that the rejection under 35 U.S.C. § 103(a) based upon Wood is traversed based upon the amendments to the claims.

A petition for a three month extension of time has been submitted herewith to extend the deadline for filing this submission until March 7, 2007. No additional fee is believed to be required. However, if an additional fee is required or otherwise necessary to cover any deficiency in fees previously paid, authorization is hereby given to charge our Deposit Account No. 50-3569.

Respectfully submitted,

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